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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,603	04/26/2001	Henry L. Mei	00200S	8761

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EXAMINER
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YOON, TAE H

ART UNIT	PAPER NUMBER
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1714

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DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/843,603

Applicant(s)

Mei et al

Examiner

T. Yom

Group Art Unit

1714

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-20 is/are pending in the application.
- Of the above claim(s) 1-15 and 20 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 16-19 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). P
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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### DETAILED ACTION

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15, drawn to a pigmented polymeric composition, classified in class 524 and 523, subclass 430+ and 212+.
- II. Claim 16-19, drawn to a silane surface treated white pigment, classified in class 106, subclass 400+.
- III. Claim 20, drawn to a silane and a polysiloxane surface treated white pigment or extended white pigment, classified in class 106, subclass 400+.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II (and III) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because a white pigment can be surface treated with various silanes and/or siloxane as evidenced by Group II and III. The subcombination has separate utility such as a paint composition.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for Group III is not required for Group II or I, restriction for examination purposes as indicated is proper.

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During a telephone conversation with Mr/ Dilworth on April 4, 2003 a provisional election was made with traverse to prosecute the invention of Group II, claims 16-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-15 and 20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) 1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before

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the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a); or

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-18 are rejected under 35 U.S.C. 102(b) as anticipated by Bunger et al (US 3,689,300).

Bunger et al teach the instant silane surface treated white pigment at col. 3, line 29 to col. 4, line 20. Alumina modified silica sol in examples 1 and 9-15 is a white pigment.

Thus, the instant invention lacks novelty.

Claims 15-19 are rejected under 35 U.S.C. 102(b) as anticipated by Chino et al (US 6,096,829).

Chino et al teach the instant silane surface treated white pigment at col. 8, lines 11-31.

Thus, the instant invention lacks novelty.

Claims 15-18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Campbell et al (US 5,853,809).

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Campbell et al the instant silane surface treated silicas at col. 7, line 9 to col. 8, line 21. Said silicas have an average diameter of 1 to 1000 nm (0.001 to 1  $\mu$ m) are inherently white pigments since they meet the instant disclosure at page 3, line 17 (0.005 to 1  $\mu$ m).

Thus, the instant invention lacks novelty.

Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chino et al (US 6,096,829) and Campbell et al (US 5,853,809).

The instant invention recites an isocyanato functional silane over Chino et al. However, the use of such silane as a coupling agent for inorganic particles is a routine practice in the art as taught by Campbell et al, col. 8, lines 1-21. Campbell et al also teach an epoxy functional silane of Chino et al.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize the isocyanato functional silane (such as Silquist A 1310) of Campbell et al in Chino et al since the use of silanes having a reactive group as a coupling agent for inorganic particles is a routine practice in the art.

Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunger et al (US 3,689,300) and Campbell et al (US 5,853,809).

The instant invention recites an isocyanato functional silane over Bunger et al. However, the use of such silane as a coupling agent for inorganic particles is a routine practice in the art as

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taught by Campbell et al, col. 8, lines 1-21. Campbell et al also teach an epoxy functional silane of Bunger et al.


It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize the isocyanato functional silane (such as Silquist A 1310) of Campbell et al in Bunger et al since the use of silanes having a reactive group as a coupling agent for inorganic particles is a routine practice in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/April 4, 2003

  
TAE H. YOON  
PRIMARY EXAMINER